Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Petition for Rulemaking of the	)	
Wireless Ethernet Compatibility Alliance	)	RM-10371
To Permit Unlicensed National Information	)	
Infrastructure Devices to Operate in the	)	
5.470-5.725 GHz Band	)	

COMMENTS OF INTEL CORPORATION

I. INTRODUCTION

The Intel Corporation (Intel) hereby submits comments regarding the above-referenced Wireless Ethernet Compatibility Alliance (WECA) petition for a rulemaking to allocate the 5.470-5.725 GHz band for use by wireless local area networks ("WLAN") and other unlicensed service devices. Intel is a manufacturer of wireless products in the 2.4 GHz and 5 GHz bands including products such as Intel PRO/Wireless 2011b for 802.11b and PRO/Wireless 5000 for 802.11a. These products are intended for sale inside and outside of the United States. WECA's proposal would align the U.S. spectrum with the spectrum already allocated for countries under CEPT regulatory guidance. As a result, Intel and other WLAN vendors would be able to sell the same products worldwide, which would reduce equipment costs, increase competition and foster new consumer uses. Therefore, Intel believes the Federal Communications Commission ("the Commission") should grant the WECA petition and issue a notice of proposed rulemaking to amend Part 15 of the rules and authorize the use of the 5.470-5.725 GHz band by U-NII devices.

A. Allocating additional spectrum is in the public interest due to increased competition in the wireless industry domestically and globally.

The WLAN industry is growing at a rapid pace in the United States and abroad. However, spectrum for use by the WLAN industry is becoming increasingly scarce. In fact, the U-NII band was chosen for WLAN products for two equally compelling reasons: higher throughput rates and the additional spectrum capacity available in the band. Allocation of additional spectrum within the U-NII band would stimulate competition domestically and abroad, by allowing the broadband wireless community to expand its reach with new device capabilities and capacities. For example, the capability of 802.11a devices would be vastly improved for public hot spot deployments by allowing for much greater densities, resulting in increased user satisfaction (better performance) and improved vendor cost models. In enterprises, additional spectrum would reduce IT infrastructure deployment costs by allowing for simplified site planning while increased capacity would expand the possible uses for 802.11a.

B. Allocating spectrum in the 5.470-5.725 band would allow WLAN Vendors to produce 802.11a products for multiple markets without modification.

Increasing the allowable spectrum to 5.470-5.725 GHz would provide WLAN vendors and their customers with common products across the United States and Europe. This would allow WLAN vendors to reduce costs and more fully exploit economies of scale in production, resulting in increased market growth. Consumers could use one product as they traverse harmonized regulatory environments, allowing for increased utilization of the spectrum already guaranteed by the Commission. Today, the United States is perceived as lagging Europe in wireless technology. American WLAN vendors and consumers could substantially benefit if the spectrum in the US and Europe were better aligned. Intel believes that creating a common

spectrum plan between the US and Europe would allow American manufacturers of WLAN products to compete on an even basis with their European counterparts, a critical issue as the nascent WLAN market grows from initial deployments to full user capacity.

C. Concerns regarding potential inferences with existing devices in this spectrum have already been addressed in Europe.

Allocating additional spectrum would not create objectionable interference with existing devices in the 5.470-5.725 band. As noted in the WECA petition, considerable analysis was performed by the Commission and the industry in the original allocation of the U-NII spectrum regarding the interference impact on other uses including aeronautical radio-navigation, amateur radio, fixed-satellite, MSS feeder links, and government radar. The same classes of devices are currently being used in the spectrum in question. In addition, the industry (including the European Telecommunications Standardization Institute) has undergone extensive analysis on interference with radar and the fixed-satellite feeder links. Current products and technologies are quite capable of avoiding interference with the primary users in this band through techniques already mandated for use of the same spectrum in Europe.

II. CONCLUSION

For the foregoing reasons, Intel respectfully requests that the Commission grant the WECA petition and issue a notice of proposed rulemaking to amend Part 15 of the rules and authorize the use of the 5.470-5.725 GHz band by U-NII devices. Intel recommends that the proposed rules merely extend the current rules governing the operation of U-NII devices in the 5.25-5.35 GHz band to the newly authorized band. This would allow growth in the WLAN

industry, promote worldwide competition, and contribute to the expected success of 802.11 WLAN products.

Respectfully submitted,

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